



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/731,596  
Filed: December 9, 2003  
Inventor(s):  
Bijan Sayyarodsari, Eric Hartman,  
Celso Axelrud, and Kadir Liano

**Title: SYSTEM AND METHOD OF APPLYING ADAPTIVE CONTROL TO THE CONTROL OF PARTICLE ACCELERATORS WITH VARYING DYNAMICS BEHAVIORAL CHARACTERISTICS USING A NONLINEAR MODEL PREDICTIVE CONTROL TECHNOLOGY**

Examiner: Pham, Thomas K.  
Group/Art Unit: 2121  
Atty. Dkt. No: 5650-03600

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, Alexandria, VA 22313-1450, on the date indicated below.

Jeffrey C. Hood

Signature

8/16/2006  
Date

**RESPONSE TO OFFICE ACTION OF  
MAY 1, 2006**

**Mail Stop Amendment**  
**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, VA 22313-1450**

Dear Sir:

This paper is submitted in response to the Office Action of May 1, 2006, to further highlight why the application is in condition for allowance.

Please amend the case as listed below.